

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 November 2004 (25.11.2004)

PCT

(10) International Publication Number
WO 2004/102896 A3

(51) International Patent Classification⁷: **H04L 12/56**

(21) International Application Number:
PCT/EP2003/005087

(22) International Filing Date: 15 May 2003 (15.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): TELEFONAKTIEBOLAGET LM ERICSSON (PUBL) [SE/SE]; S-164 83 Stockholm (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HUNDSCHIEDT, Frank [NL/NL]; In de Boongaard 26, NL-6464 GC Kerkrade (NL). HAMELEERS, Heino [NL/NL]; Manzardstraat 5, NL-6471 CZ Kerkrade (NL).

(74) Agent: TONSCHEIDT, Andreas; Ericsson Eurolab Deutschland GmbH, Ericsson Allee 1, 52134 Herzogenrath (DE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

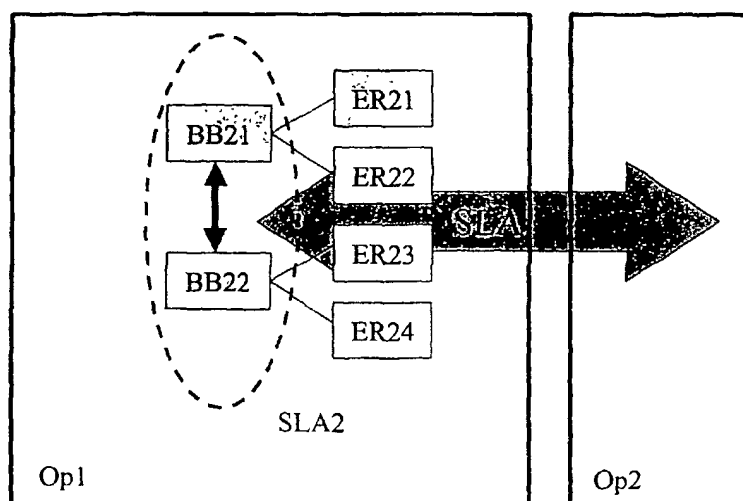
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

[Continued on next page]

(54) Title: METHOD FOR THE DISTRIBUTION OF A NETWORK TRAFFIC ACCORDING TO SLA AND QOS PARAMETERS



(57) Abstract: The invention relates to a method, a bandwidth broker and an edge node for providing a predefined quality of service between two communication partners, wherein the quality of service is provided by means of a plurality of connections and a decentralised admission control.



GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR),
OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG)

(88) Date of publication of the international search report:
13 January 2005

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

PCT/EP 03/05087

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L12/56

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-------------------------|
| X | US 2003/074443 A1 (MELAKU MAKONNEN ET AL) 17 April 2003 (2003-04-17) paragraphs '0033!', '0040!', '0052!', '0065!', '0080!', '0081! figure 5 | 1-15 |
| X | WO 02/51052 A (ROTGOLD GIL ; COMGATES LTD (IL); TIROSH JACOB (IL); ZLATOKRILOV HAIM () 27 June 2002 (2002-06-27) page 3, line 9 - line 17 | 1,9,13 |
| A | page 7, line 19 - page 8, line 12 page 13, line 14 - page 14, line 2 page 16, line 16 - line 23 figures 1,2A | 2-8, 10-12, 14,15 |
| | ----- -/-- | |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *8* document member of the same patent family

Date of the actual completion of the international search

6 May 2004

Date of mailing of the international search report

13/05/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Perez Perez, J

INTERNATIONAL SEARCH REPORT

PCT/EP 03/05087

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|--|---|-----------------------|
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| A | <p>BERTHOU P ET AL: "MULTIMEDIA MULTI-NETWORKING: A NEW CONCEPT MULTI-RESEAUX MULTIMEDIA: UN NOUVEAU CONCEPT" ANNALES DES TELECOMMUNICATIONS - ANNALS OF TELECOMMUNICATIONS, PRESSES POLYTECHNIQUES ET UNIVERSITAIRES ROMANDES, LAUSANNE, CH, vol. 57, no. 7/8, July 2002 (2002-07), pages 721-750, XP001124785 ISSN: 0003-4347 section IV</p> <p>-----</p> | 1-15 |

INTERNATIONAL SEARCH REPORT

PCT/EP 03/05087

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|----|---------------------|---|--|
| US 2003074443 | A1 | 17-04-2003 | NONE | |
| WO 0251052 | A | 27-06-2002 | US 2003141093 A1 AU 2245202 A WO 0251052 A2 | 31-07-2003 01-07-2002 27-06-2002 |